Algorithm to assist in decisions on testing and treatment for novel influenza A (H1N1) virus in Arizona

Patient presents with:

- Fever >37.8°C (100° F) AND
- Cough and/or sore throat in the absence of a known cause *OR*
- Sepsis-like syndrome[1] or Acute Respiratory Distress Syndrome

No → No influenza testing recommended. Additional workup and follow-up as clinically-indicated.

Yes → Implement appropriate infection control measures [2]

Do patient's symptoms indicate a need for hospitalization after initial evaluation and treatment?

Yes →

Obtain any of the following: nasopharyngeal (NP) or oropharyngeal (OP) swabs, or NP or OP aspirates [3]; endotracheal aspirate (intubated patients); or sputum (if evidence of pneumonia)

- Store in refrigerator while awaiting transport (do not freeze)
- Send specimen to your regular laboratory or the state public health lab for influenza testing[3]

Recommend early antiviral treatment with oseltamivir or zanamivir [4,5,6]

No →

1) If patient is at high risk for complications[4] recommend early treatment with antiviral agents.[5] If patient is not in high risk group, use physician discretion for treatment.[5]
2) Consider additional work-up for other respiratory conditions and co-infections if warranted.
3) Patient should:

- Stay home until 24 hours after fever resolves without the use of fever reducing medications
- Use hand, respiratory and cough hygiene
- Seek emergency medical care if warranted

1. As with seasonal influenza, infants, adults ≥65 years-old, and persons with compromised immune systems may have atypical presentations.
2. Please see detailed ADHS interim infection control recommendations at http://www.azdhs.gov/flu/h1n1/providers.htm
3. Real-time polymerase chain reaction (RT-PCR) is the preferred laboratory test for identifying novel influenza A (H1N1) virus. Rapid antigen tests and immunofluorescence tests have unknown sensitivity and specificity to detect novel influenza A (H1N1) virus. For more information, please see http://www.cdc.gov/h1n1flu/specimencollection.htm
4. Persons at high risk of complications: Children less than 5 years old; persons aged 65 years or older; children and adolescents (aged 6 months – 18 years) who are receiving long-term aspirin therapy and who might be at risk for experiencing Reye syndrome after influenza virus infection; pregnant women; adults and children who have chronic pulmonary, cardiovascular, hepatic, hematological, neurologic, neuromuscular, or metabolic disorders; adults and children who have immunosuppression (including immunosuppression caused by medications or by HIV); and residents of nursing homes and other chronic-care facilities.
5. Information on use of antiviral agents can be found at: http://www.cdc.gov/h1n1flu/recommendations.htm
6. Interim guidance for clinicians is available at: http://www.cdc.gov/h1n1flu/identifyingpatients.htm

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